CONTOUR FARMING

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service - practice code 330

CONTOUR FARMING

Contour farming is performed on sloping cropland by following the natural contours when tilling the soil, planting, and cultivating. It also includes following established grades of terraces
or diversions.

PRACTICE INFORMATION

Contour farming is a very cost effective practice when properly planned and applied.

The purpose of this practice is to reduce erosion, control runoff water, and increase moisture infiltration. Contour farming generally applies to sloping cropland but may be applicable on recreation and wildlife areas where cultural practices such as tillage and planting are used for production of special purpose crops.

Properly designed couture farming will utilize tillage marks and furrows to slow runoff and allow more moisture to infiltrate. Contour farming can increase erosion if rainfall amount exceeds the ability of the contours to remove the runoff. Therefore, this practice is usually planned in conjunction with other practices needed for support in the event runoff exceeds the carrying capacity of the contours.

To be effective, the contours need to meet certain design criteria. Local standards and specifications generally cover the following items:

1. Alignment requirements when planned and applied with practices such as terraces, diversions, and contour strips.
2. Alignment requirements when contour farming is applied without protection from supporting practices. (see above)
3. Established tolerances for deviation from true contour, row grade and row length.

The following pages contain the conservation effects expected to occur when this practice is applied. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. Users are cautioned that these effects are estimates that may or may not apply to a specific site.

CONSERVATION PRACTICE PHYSICAL EFFECT WORKSHEET

NOTE: *recorded in microsoft word 6.0 - use tabs to change cells/fields*

STATE	Iowa	FIELD OFFICE		DATE	12/5/96

PRACTICE: 330 Contour Farming	NOTES:
RESOURCE: SOIL **RESOURCE CONCERN: EROSION**	**Help Message: Click on form field for choice lists. Tab key to move around. "N/A" is the default.**

RESOURCE INDICATORS	**PHYSICAL EFFECTS**
SHEET AND RILL	significant reduction in sheet and rill erosion
WIND	N/A
EPHEMERAL GULLY	moderate reduction in ephemeral gully erosion
CLASSIC GULLY	insignificant
STREAMBANK	insignificant
IRRIGATION INDUCED	N/A
SOIL MASS MOVEMENT	insignificant
ROADBANK/CONSTRUCTION	N/A
OTHER	
RESOURCE CONCERN: **SOIL CONDITION**	
SOIL TILTH	insignificant
SOIL COMPACTION	N/A
SOIL CONTAMINATION	
• SALTS	moderate reduction in soil salinity
• ORGANICS	N/A
• FERTILIZERS	N/A
• PESTICIDES	N/A
• OTHER	
DEPOSITION/DAMAGE	
• ONSITE	significant reduction/onsite deposition damage
• OFFSITE	significant decrease/offsite deposition damage
DEPOSITION/SAFETY	
• ONSITE	significantly improve onsite safety/deposition
• OFFSITE	sign. improve offsite safety hazard/deposition
OTHER	
RESOURCE: **WATER** RESOURCE CONCERN: **WATER QUANTITY**	
SEEPS	slight increase in seepage hazard
RUNOFF/FLOODING	moder. decrease in runoff/flooding
EXCESS SUBSURFACE WATER	slight increase in excess subsurface water
INADEQUATE OUTLETS	moderate increase in H20 outlet concern
WATER MGT. IRRIGATION	
• SURFACE	insignificant
• SPRINKLER	insignificant
WATER MGT. NON-IRRIGATED	significant improvement in moisture use
RESTRICTED FLOW CAPACITY	
• ONSITE	insignificant
• OFFSITE	insignificant
RESTRICTED STORAGE	sign. reduction in sedimentation of H20 storage
OTHER	

RESOURCE: **WATER** RESOURCE CONCERN**: WATER QUALITY**	
RESOURCE	**PHYSICAL EFFECTS**
GROUNDWATER CONTAMINANTS	
• PESTICIDES	insignificant
• NUTRIENTS AND ORGANICS	insignificant
• SALINITY	insignificant
• HEAVY METALS	insignificant
• PATHEGENS	insignificant
• OTHER	
SURFACE WATER CONTAMINANTS	
• PESTICIDES	slight reduction in SWater contam./pesticides
• NUTRIENTS AND ORGANICS	slight reduction in SWater contam./nutr.,organics
• SUSPENDED SEDIMENTS	sign. reduction in SWater contam./susp. sedi.
• LOW DESOLVED OXYGEN	insignificant
• SALINITY	insignificant
• HEAVY METALS	slight reduction in SWater contam./heavy metals
• WATER TEMPERATURE	insignificant
• PATHEGENS	insignificant
AQUATIC HABITAT SUITABILITY	significant improvement in Aqua. Hab. Suit.
OTHER	
RESOURCE: **AIR** RESOURCE CONCERN: **AIR QUALITY**	
AIRBORN SEDIMENT AND SMOKE PARTICLES	
• ONSITE SAFETY	N/A
• OFFSITE SAFETY	N/A
• ONSITE STRUCT. PROBLEMS	N/A
• OFFSITE STRUCT. PROBLEMS	N/A
• ONSITE HEALTH	N/A
• OFFSITE HEALTH	N/A
AIRBORN SEDIMENT CAUSING CONVEYANCE PROBLEMS	N/A
AIRBORN CHEMICAL DRIFT	N/A
AIRBORN ODORS	N/A
FUNGI, MOLDS, AND POLLEN	N/A
OTHER	
RESOURCE CONCERN: **AIR CONDITION**	
AIR TEMPERATURE	N/A
AIR MOVEMENT (windbreak effect)	N/A
HUMIDITY	N/A
OTHER	

RESOURCE: **PLANT** RESOURCE CONCERN: **SUITABLIITY**	
RESOURCE	**PHYSICAL EFFECTS**
SITE ADAPTATION	N/A
PLANT USE	N/A
OTHER	
RESOURCE CONCERN: **CONDITION**	
PRODUCTIVITY	slight improvement in plant cond./productivity
HEALTH, VIGOR, SURVIVAL	slight improvement in plant health,vigor,survival
OTHER	
RESOURCE CONCERN: **MANAGEMENT**	
ESTAB., GROWTH, HARVEST	N/A
NUTRIENT MANAGEMENT	N/A
PESTS	N/A
THREAT/ENDANGERED PLANTS	N/A
OTHER	
RESOUTCE: **ANIMAL** RESOURCE CONCERN: **HABITAT**	
FOOD	N/A
COVER/SHELTER	N/A
WATER (QUANTITY & QUALITY)	N/A
OTHER	
RESOURCE CONCERN: **MANAGEMENT**	
POPULATION BALANCE	N/A
THREAT/ENDANGERED ANIMALS	N/A
HEALTH	N/A
OTHER	
RESOURCE: **HUMAN** RESOURCE CONCERNS**: ECONOMIC CONSIDERATIONS**	
PLAN / COST EFFECTIVENESS	significantly cost effective
CLIENT FINANCIAL CONDITION	significantly cost effective
MARKETS FOR PRODUCTS	N/A
AVAILABLE LABOR	insignificant
AVAILABLE EQUIPMENT	insignificant

RESOURCE: **HUMAN** RESOURCE CONCERN: **SOCIAL CONSIDERATIONS**	
RESOURCE INDICATORS	**PHYSICAL EFFECTS**
PUBLIC HEALTH AND SAFETY	N/A
PRIVATE/PUBLIC VALUES	N/A
CLIENT CHARACTERISTICS	N/A
RISK TOLERANCE	N/A
TENURE	N/A
OTHER	
RESOURCE CONCERN: **CULTURAL CONSIDERATIONS**	
ABSENCE/PRESENCE OF CULTURAL RESOURCES	insignificant
SIGNIFICANCE OF CULTURAL RESOURCES	insignificant
MITIGATION OF NEGITIVE CULTURAL RES. IMPACTS	insignificant
OTHER	